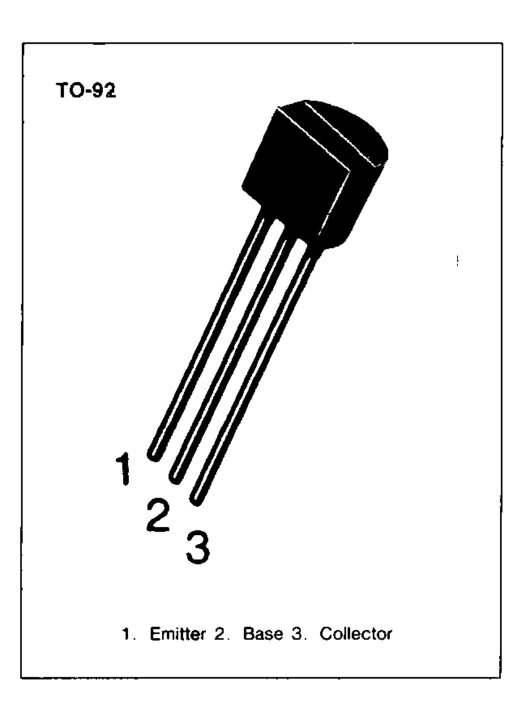
Transistors
2SC9018



AM/FM IF AMPLIFIER, LOCAL OSCILLATOR OF FM/VHF TUNER

- High Current Gain Bandwidth Product **f_T=1,100 MHz (Typ)**



ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	30	V
Collector-Emitter Voltage	V_{CEO}	15	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	50	mA
Collector Dissipation	P_C	400	mW
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	−55~150	°C

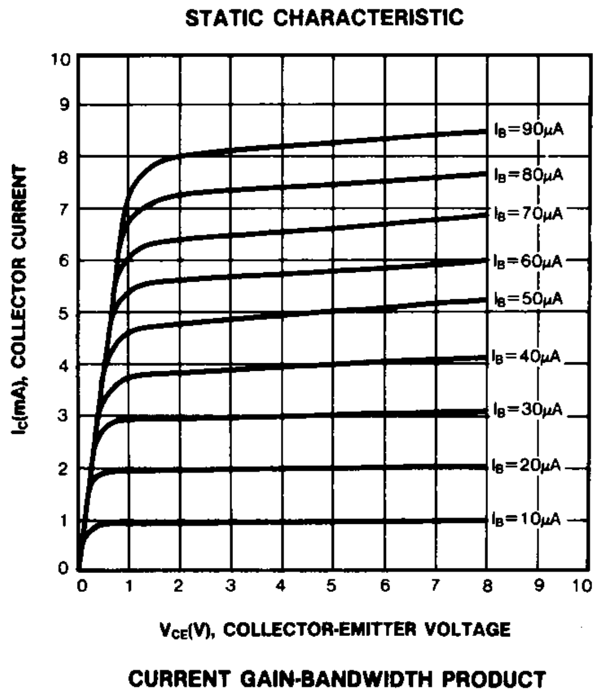
ELECTRICAL CHARACTERISTICS (T_a=25°C)

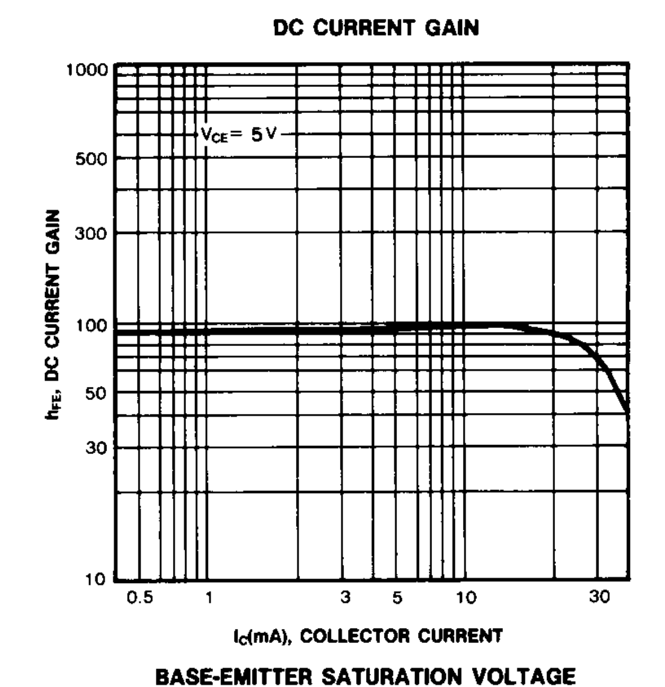
Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	I_C=100μA, I_E=0	30			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C=1.0mA, I_B=0	15			V
Emitter-Base Breakdown Voltage	BV_{EBO}	I_E=100μA, I_C=0	5			V
Collector Cutoff Current	I_{CBO}	V_{CB}=12V, I_E=0			50	nA
DC Current Gain	h_{FE}	V_{CE}=5V, I_C=1.0mA	28	100	198	
Collector-Emitter Saturation Voltage	V_{CE}(sat)	I_C=10mA, I_B=1mA			0.5	V
Output Capacitance	Cob	V_{CB}=10V, I_E=0 f=1MHz		1.3	1.7	pF
Current Gain-Bandwidth Product	f_T	V_{CE}=5V, I_C=5mA	700	1100		MHz

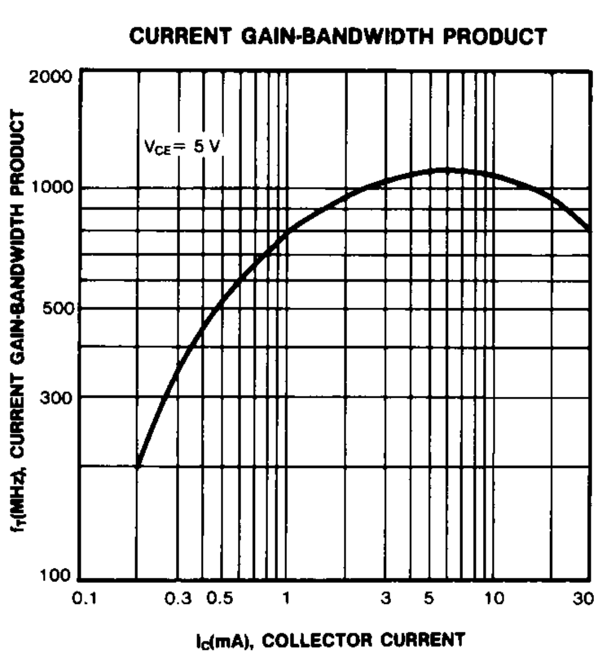
h_{FE} CLASSIFICATION

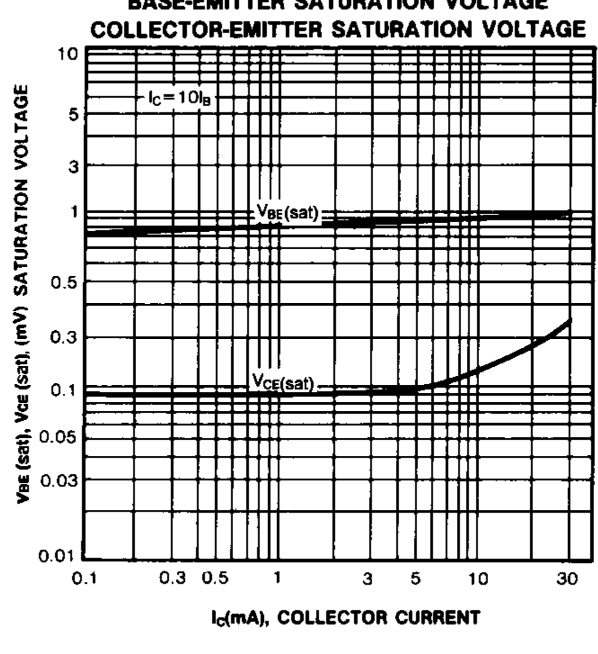
Classification	D	E	F	G	H	I
h_{FE}	28-45	39-60	54-80	72-108	97-146	132-198

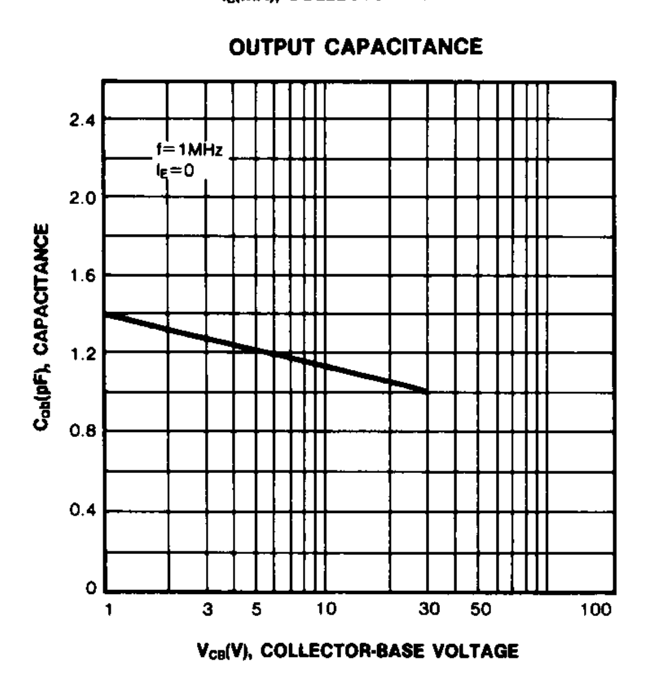



STATIC CHARACTERISTIC
IC(mA), COLLECTOR CURRENT
VCE(V), COLLECTOR-EMITTER VOLTAGE
IB=90μA
IB=80μA
IB=70μA
IB=60μA
IB=50μA
IB=40μA
IB=30μA
IB=20μA
IB=10μA


DC CURRENT GAIN
hFE, DC CURRENT GAIN
IC(mA), COLLECTOR CURRENT
VCE= 5 V


CURRENT GAIN-BANDWIDTH PRODUCT
fT(MHz), CURRENT GAIN-BANDWIDTH PRODUCT
IC(mA), COLLECTOR CURRENT
VCE= 5 V


BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE
VBE (sat), VCE (sat), (mV) SATURATION VOLTAGE
IC(mA), COLLECTOR CURRENT
IC=10IB
VBE(sat)
VCE(sat)


OUTPUT CAPACITANCE
COB(pF), CAPACITANCE
VCB(V), COLLECTOR-BASE VOLTAGE
f=1MHz
IE=0